

# MILATARI NEWLETTER

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February 1983

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NEXT MEETING \* \* \* \* Saturday, February 26th  
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## COMPUTER FEST IS COMING

March 5th & 6th marks the culmination of many hours and days of hard work by many members of our club. The 1st Computer Fest will be held in the mall of Brookfield Square Shopping Center.

Arrangements have been made several computer user groups, high schools, colleges and providers of online computer service to demonstrate the exciting field of personal computers.

We have 15 different users groups signed up to man 14 different booths. The groups who have agreed to be there are:

COCO-MUG	Color Computer - Milwaukee Users Group
MACE	Milwaukee Area Commodore Enthusiats
Commodore64	Commodore 64 Users - Waukesha
VIC-20	VIC-20 Users Group
MATUG	Milwaukee Area TRS-80 User Group
HUG	Heath User Group
IBM-PC	IBM Personal Computer Users
OSI	Ohio Scientific Computer Users
Osborne	Osborne Computer Users
SMUG	Sinclair Milwaukee Users Group
TIUG	TI Users Group
Apple	Wisconsin Apple Users Group
Apple	C.U. Apple Users Group
WCS	Wisconsin Computer Society (UWM)
MILATARI	Milwaukee Area ATARI Users Group

We are also in contact with several high schools and colleges and have this tentative list of participants:

Cardinal Stritch College	UW-Parkside
Carroll College	West Allis High Schools
Waukesha High Schools	Elmbrook High Schools
Washington High School	Racine High Schools
Hartland(Arrowhead) High Schools	New Berlin High Schools

Dow Jones, Source, Compu-serve and Micro-share 'for pay' information systems will be demonstrated at various user group booths. John Taylor's MAUDE bulletin board service will have a booth at the fest. Our own MILATARI bulletin board system will be operating in a local mode at our booth.

This show has the makings of the largest non-commercial computer show ever held in this area. Make sure you are there to help make it so.



## Milwaukee Area ATARI Users Group

This newsletter is written and printed by members of the Milwaukee Area ATARI Users Group (MILATARI), an association of individuals with a common interest in using and programming ATARI computers. MILATARI is not affiliated with the ATARI company, nor any other commercial organizations.

All articles are written and donated by the membership. Opinions expressed in this publication are those of the individual author and do not necessarily represent, nor reflect, the opinions of MILATARI nor those of any other commercial or non-commercial organizations. Any article appearing in this newsletter may be reproduced, providing credit is given to the author and to MILATARI.

Write MILATARI Newsletter at P.O. Box 1191, Waukesha, WI 53187 for more information.

## MEMBERSHIP INFORMATION

Membership is open to individuals and families who are interested in using and programming ATARI computers. The membership includes the subscription to this newsletter and access to the user's library. The membership fee is \$12.00 per year. Contact Larry Leskovsek, Treas. at 547-0249 for more information.

## MEETING INFORMATION

MILATARI meetings are held once monthly. This month the meeting will be held at the University of Wisconsin - Waukesha campus. The meeting room is 239 in Northview Hall. UWWC is located at 1800 University Drive, Waukesha. The BASIC class and technical sessions begin at 2PM. The business meeting will be at 3PM.

## MILATARI Officers:

President	Gary Nolan 353-9716
Vice-president	Nick Liberski 786-8434
Secretary/ Treasurer	Larry Leskovsek 547-0249
Education	Linda Scott 466-2314
Cassette Librarian	Ron Friedel 354-1717
Disk Librarian	Bruce Freistedt
Publications Librarian	Karl Buschhaus 774-2576
Newsletter Editor	David Frazer 542-7242

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## Technical support Group:

The following members have indicated a willingness to assist MILATARI members.

William Lawrence	1-968-3082 Programming
Don Wilcox	228-1650 Programming
Erich Hanson	252-3146 Prog/Tech
Gary Nolan	353-9716 Prog/Tech
David Frazer	542-7242 Prog/Tech
Steve Booth	367-8739 Programming

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## MILATARI Bullentin Board:

The MILATARI Users Group maintains a 24 hr bulletin board service. Messages may be posted and read and public domain programs uploaded and downloaded. The system operates at 300 baud. The phone number is 352-2772.



## STRINGS AND FORMATTING

Some information on and examples of string handling and formatting options for the ATARI 400/800 (tm) Home Computer System.

- 1) String Handling
- 2) String Array Emulation
- 3) Double-subscript String Arrays
- 4) Inverting Characters
- 5) Formatting Options

Information provided by:

ATARI INC.  
CONSUMER PRODUCT SERVICE  
PRODUCT SUPPORT GROUP

DEMOPAC #1

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### STRING HANDLING ATARI 8K BASIC vs. ATARI Microsoft BASIC

The major difference between ATARI Microsoft and ATARI 8K BASIC is in the handling of string variables. Here is the 1st in a series of articles giving an overview of the ATARI 8K approach to strings, and a comparison with the ATARI Microsoft method.

It is often necessary to split strings into pieces called substrings. In ATARI Microsoft BASIC, this is accomplished with special functions, MID\$, RIGHT\$ and LEFT\$. In ATARI 8K BASIC, strings are split easily by using a subscript on the string variable. For example, A\$(5,10) results in a substring which starts at the fifth character of A\$ and ends at the tenth character. If only one number is given in the subscript, the substring will start with that character and end with the last character of the string.

Here is a table of the ATARI 8K equivalents of ATARI Microsoft string functions:

ATARI Microsoft:

MID\$(A\$,X,Y)  
LEFT\$(A\$,X)  
RIGHT\$(A\$,X)

ATARI 8K:

A\$(X,Y)  
A\$(1,X)  
A\$(LEN(A\$)-X+1)

The function LEN(A\$) is the same in both types of BASIC, and returns the length, or number of characters (including blanks) of the string A\$. This function is also used in concatenation of strings, that is, putting two strings together into one string. In ATARI Microsoft, concatenation is accomplished with a plus sign. In ATARI 8K, the second string is concatenated to the first by making it a substring which starts just after the last character. Here is an example of two types of concatenation in both BASICs:



# MILATARI \* \* \* FEBRUARY 1983

ATARI Microsoft:

A\$=A\$+B\$

C\$=A\$+B\$

ATARI 8K:

A\$(LEN(A\$)+1)=B\$

C\$=A\$

C\$(LEN(C\$)+1)=B\$

In ATARI Microsoft, the subscript on the string indicates a string array, which is handled just like a numeric array. In ATARI 8K BASIC, however, a string array is kept in a very long string, which is put together using concatenation, and taken apart with string splitting, as shown above. Here is an example of a simple string array in both types of BASIC:

ATARI Microsoft:

A\$(1)="AAA"

A\$(2)="BBB"

A\$(3)="CCC"

ATARI 8K:

ARRAY\$="AAABBBCCCC"

ARRAY\$(1,3)="AAA"

ARRAY\$(4,6)="BBB"

ARRAY\$(7,9)="CCC"

When using the long-string method, it is often helpful to make all of the substrings in the array the same length, so that it is easy to calculate the position in the array. This can be done by padding the smaller substrings with blanks. Remember, blank spaces count in the length of the string.

```

1 REM STRINGARRAY
2 REM WBB/JB 3/82
3 REM A demonstration of the use of a long-string variable
4 REM to emulate a string array.
5 REM This example keeps a list of customer names.
6 REM It will handle up to 100 names, each up to 30 characters long.
7 REM *****
10 DIM ARRAY$(100*30),NAME$(30),BLANK$(30),YN$(1)
11 REM array$ holds 100 names
12 REM name$ is used to accept input name
13 REM blank$ is used to blank-fill, so that lengths are even
14 REM yn$ accepts yes/no answers
20 BLANK$="":REM initialize 30-space string
30 FOR I=1 TO 100:REM initialize long-string to reserve memory space
40 ARRAY$(I*30-29,I*30)=BLANK$
50 NEXT I:REM fill w/space-length of array$ in now 3000
52 REM *****
53 REM get customer number and verify that it doesn't already exist
100 PRINT:PRINT "CUSTOMER NUMBER (1-100) (0=END);"
110 INPUT I
120 IF I=0 THEN 500:REM if it's the end, go print the list
130 IF ARRAY$(I*30-29,I*30)=BLANK$ THEN 400:REM if new number, go get name
140 PRINT "CUSTOMER NUMBER ";I;" IS ASSIGNED TO:"
150 PRINT ARRAY$(I*30-29,I*30)
160 PRINT:REM if number is already in use, print out number and name
170 PRINT "DO YOU WISH TO REPLACE WITH NEW NAME (Y/N)";
180 INPUT YN$
190 IF YN$="N" THEN 100

```



```

200 IF YN$<>"Y" THEN 170
201 REM if you want to replace it or it's a new number, go ahead
202 REM *****
400 PRINT "CUSTOMER NAME ";
410 INPUT NAME$:REM get new name
419 REM fill up name with blanks, in case it is less than 30 charaters
420 NAME$(LEN(NAME$)+1)=BLANK$
429 REM concatenate new name into array
430 ARRAY$(I*30-29,I*30)=NAME$
440 GOTO 100:REM go get the next one
498 REM *****
499 REM print out the customer list
500 PRINT "DO YOU WANT TO PRINT THE CUSTOMER"
510 PRINT " LIST ON THE SCREEN (Y/N) ";
520 INPUT YN$
530 IF YN$="N" THEN 600
540 IF YN$<>"Y" THEN 500
541 REM if the answer is yes, go ahead and print on the screen
550 PRINT "NUMBER","CUSTOMER NAME":PRINT
560 FOR I=1 TO 100
570 IF ARRAY$(I*30-29,I*30)<>BLANK$ THEN PRINT I,ARRAY$(I*30-29,I*30)
580 NEXT I
590 PRINT :PRINT "** END OF LIST **":PRINT
599 REM *****
600 PRINT "DO YOU WANT TO PRINT THE CUSTOMER"
610 PRINT " LIST ON THE PRINTER (Y/N) ";
620 INPUT YN$
630 IF YN$="N" THEN END
640 IF YN$<>"Y" THEN 600
641 REM if the answer is yes, go ahead and print on printer
650 LPRINT "NUMBER","CUSTOMER NAME":LPRINT
660 FOR I=1 TO 100
670 IF ARRAY$(I*30-29,I*30)<>BLANK$ THEN LPRINT I,ARRAY$(I*30-29,I*30)
680 NEXT I
690 LPRINT :LPRINT "** END OF LIST **":LPRINT
700 END

```

(continued on next page)

### Logo developed for ATARI

(from 2/14/83 InfoWorld)

Atari has signed a contract with Logo Systems of Montreal, Canada, to develop a version of the Logo language for the ATARI 400, 800 and 1200XL computers. Under the agreement, the full-featured Atari Logo will be developed by Logo Computer Systems and exclusively manufactured for and distributed by ATARI, Inc. The ATARI Logo, a single 16K cartridge, will plug into any ATARI home computer, with no extra hardware required. The suggested retail price of the cartridge will be under \$100. The cartridge will be available this summer.





```

50 NAME$(I,I)=CHR$(ASC(NAME$(I,I))+128)
55 REM add 128 to each character number to make it inverse video
60 NEXT I
70 PRINT NAME$:REM display inverse name
80 GOTO 20:REM try another one

```

## FORMATTING with ATARI 8K BASIC DEB 3/82

Every computer has some way of placing text where you want it, in order to create exactly the effect you need. Most computers have special formatting commands. With ATARI 8K BASIC, there are several methods to choose from, depending on your needs. Using the TAB key allows quick movement across the screen to a designated column. Using a comma in the PRINT statement will automatically allow a number of spaces between fields. The POSITION statement can be used to put the cursor in any specified row or column, in any mode. In addition to these basic methods, there are special procedures for formatting printed output, and for such functions as right alignment. Here is a brief description of various formatting options with examples.

### FORMATTING WITH THE TAB KEY

In order to produce the control characters for TABbing, the following key sequences are used. These characters will appear on your screen but not in a program listing.

```

TAB:      >  Press the ESC key, then the TAB key
Clear TAB: <- Press the ESC key, then the CTRL and TAB key simultaneously
Set TAB:   -> Press the ESC key, then the SHIFT and TAB key
            simultaneously

```

On powerup, the TAB key advances the cursor 5 default settings on one physical line. These are column positions 7,15,23,31 and 39. To clear the default TAB setting, type:

```
PRINT "> <- > <- > <- > <-"
```

After the ready prompt appears, press the TAB key. The cursor will remain in the first column. To set new TABs type:

```
PRINT "(10 spaces)->(10 spaces)->(10 spaces)->"
```

If the TAB key is now pressed, the cursor stops in columns 2,12,22,32.

To set formatting columns from within a program requires planning on the part of the programmer. The following program illustrates 8 columns with 5 spaces between each. These will then be cleared out to set up 3 columns with 16 spaces between each. Press RESET and type:

NEW

```

10 PRINT "> <- > <- > <- > <-":REM clear out default tabs
20 PRINT "(6 spaces) -> (6 spaces) ->
    (6 spaces) -> (6 spaces) -> (6 spaces) ->

```



```

(6 spaces) -> ":REM set columns
30 PRINT "A > B > C > D > E > F > G > H > I > J > K > L > M > N":
  REM use TAB to separate fields
40 PRINT " > <- > <- > <- > <- > <-":REM clear columns
50 PRINT "(17 spaces) -> (17 spaces) -> (17 spaces) ->": REM
  set new columns
60 PRINT "A > B > C > D > E > F"

```

TABbing brings columns to the next print zone as long as the length of the string is smaller than the print zone.

## FORMATTING WITH THE COMMA

The comma in a PRINT statement sets up 10 spaces between each field with the default line length of 38 characters. This results in diagonal lines rather than columns. For an example of this, press RESET and type:

```
PRINT 1,2,3,4,5,6,7,8
```

The left margin is controlled by location 82. For a full 40 column line, change the left margin to column 0 with POKE 82,0. Since 10 goes into 40, you will get regular columns. Press RESET and type:

```
POKE 82,0:PRINT 1,2,3,4,5,6,7,8
```

You may also regulate the print zone for the comma with location 201. This example gives 7 spaces between fields, then resets the width to 19. Press RESET and type:

NEW

```
10 POKE 82,0:REM allow 40 characters
20 POKE 201,8:REM set comma spacings to 7
30 PRINT 1,2,3,4,5,6,7,8,9,0,1,2,3:REM print to screen
40 POKE 201,20:REM reset comma spacing to 19
50 PRINT 1,2,3,4,5,6,7,8,9,0,1,2,3:REM print to screen
```

You may also shorten the right margin by using POKE 83, the default is 39. This example sets a 30 column screen. Press RESET and type:

NEW

```
10 POKE 82,1:REM start left margin in position 1
20 PRINT "This line has old margins of 2 ind 39":REM the next line has
   the new margins
30 POKE 83,30:REM stop right margin in position 30
40 PRINT "12345678901234567890123456789012345678901"
```

## FORMATTING WITH THE POSITION STATEMENT

Words as well as numbers can be put on the screen through the use of the POSITION statement. In the following example, the word "ATARI" is positioned on the screen three times by designating the X and Y coordinates in three POSITION statements. Press RESET and type:

NEW

```
10 POSITION 8,2:PRINT "ATARI":REM go to position 8,2 and print word
```



```

20 POSITION 18,12:PRINT "ATARI":REM go to position 18,12 and print word
30 POSITION 28,22:PRINT "ATARI":REM go to position 28,22 and print word
40 GOTO 40:REM keep it on the screen

```

## POSITION IN GRAPHICS WINDOW

The POSITION statement can also be used to write information in the graphics window of text modes 1 and 2. Press RESET and type:

```

NEW
10 GRAPHICS 2
20 POSITION 5,5:REM position cursor in row 5, column 5
30 PRINT #6;"ATARI"
40 GOTO 40:REM keep it on the screen

```

## POSITION IN TEXT WINDOW

The POSITION statement moves the cursor in the graphics window. If you wish to position the cursor in the text window, you must POKE directly into the text window cursor locations, 656 and 657 (decimal). Press RESET and type:

```

NEW
10 GRAPHICS 2
20 POKE 656,0:REM move cursor to row 0
30 POKE 657,2:REM move cursor to column 2
40 PRINT "LINE 0":REM type "LINE 0" in this position
50 POKE 656,1:REM move cursor to row 1
60 POKE 657,12:REM move cursor to column 12
70 PRINT "LINE 1":REM type "LINE 1" in this position
80 POKE 656,2:REM move cursor to row 2
90 POKE 657,22:REM move cursor to column 22
100 PRINT "LINE 2":REM type "LINE 2" in this position
110 POKE 656,3:REM move cursor to row 3
120 POKE 657,32:REM move cursor to column 32
130 PRINT "LINE 3":REM type "LINE 3" in this position
140 GOTO 140:REM keep it on the screen

```

## RIGHT ALIGNMENT

If your strings are not the same length, pad the shorter one with spaces. The following example illustrates a string being concatenated to a string of spaces to allow for a three character number. Press RESET and type:

```

NEW
10 DIM A$(2), B$(3):REM dimension strings
20 PRINT "Type in a one or two digit number ...":INPUT A$
30 ALEN = LEN(A$)
40 B$="  ":REM a string of 2 spaces
50 B$=B$(1,3-ALEN):REM allow a three digit number
60 B$(LEN(B$)+1)=A$:REM concatenate the strings
70 PRINT LEN(B$)
80 PRINT B$:REM note indent from the left side of screen

```



## PRINTER FORMATTING

Tabs on the printer can be set with a string of spaces, as in the following example. Press RESET and type:

```
NEW
10 DIM TAB$(80),A$(35):REM dimension strings
20 X=25
30 TAB$="(insert 80 spaces)":REM set up a string of spaces
40 A$="This line is indented by 25 spaces":REM message to be printed
50 OPEN #1,8,0,"P:":REM open printer for output
60 PRINT #1;TAB$(1,X);A$:REM output to the printer
70 CLOSE #1
```

-----

HARDWARE MODIFICATION - TAPE POSITIONING  
by Stan Wiley - ACE of Syracuse

**PURPOSE:** This modification allows the user to *carefully* and *slowly* position the tape counter for both saving and loading functions.

- 1) Purchase a momentary, single-pole, single-throw, normally open switch from Radio Shack. (Catalog # 275-1571). Approximately \$1.79 for a package of two.
- 2) Purchase 24 inches of light wire (doorbell wire will work). Cut this into two 12 inch sections.
- 3) Remove the four screws in the bottom of the 410 program recorder and separate the top and bottom halves of the recorder.
- 4) You will see a printed circuit board with two prongs. These prongs will be in line with the rewind button. Solder or use alligator clips, to fasten the two 12 inch sections of wire to the prongs.
- 5) Locate a convenient spot for the switch in the case, or just let the wires hang out the side of the recorder case.
- 6) Solder the other ends of the two 12 inch sections of wire to the switch terminals. (It doesn't matter which wire goes to which terminal.)
- 7) Assemble the recorder and you're all done.

TO OPERATE YOUR MODIFIED ATARI 410 PROGRAM RECORDER

- 1) Push down the play button and simply push in the new switch. You will find that your recorder will forward at *PLAY* speed, not fast forward or fast reverse. If you want fast forward or fast reverse, simply access then the same as always using the same old buttons.

**WARNING!!** THIS MODIFICATION WILL VOID ANY WARRANTY THAT MAY EXIST ON YOUR PROGRAM RECORDER.



# PRESIDENT'S RAM

by Gary Nolan

MOAN!! GROAN!! OOOH!! AAAH! OUCH!!!

Know what that sound is?

Growing pains! (And you didn't think you could hear them)

Well not only can you hear them but you can feel and see them too! Just ask anyone who was at the Jan. meeting. (Yes, there really were people sitting in the closet) I really shouldn't call them pains because this kind of growth is a pleasure. A little troublesome though, trying to fit well over 100 people into a room that only holds 100 at most. As I said at the last meeting, HELP!!! We need your help in finding a new home. A hall that could hold at least 200 people would be perfect. That would allow us to grow into it while having a stable base. And thanks to the efforts of NL editor Dave Frazer we've had that stable base for the last year. But like that pair of shoes that are still good but just don't fit, we've outgrown the bank. Every group goes through this at some stage and it's our turn now. But if we all pitch in we should be able to find an acceptable site soon.

From the "You ain't seen nothin' yet", or "Roll up yore pants Pa the flood's accomin'" department. (Take your pick)

If you think that 1982 was the year of the computer. Wait till you see what '83 has to offer. Atari's 1200 and Apple's IIe and LISA was only the beginning. TI announced what it calls the Professional computer. A loose IBM PC work-alike with 8088 microprocessor, 64K Ram, 320K built-in disk and monitor listing for \$2595. It will have limited speech recognition plus synthesized speech output. It will also accept some English type commands instead of computer type. TI will also have a under \$100-16 bit model. They are also rumored to be bringing out a portable unit. Commodore also announced a portable unit with a 5" screen, dual processors 6510/280, two 5 1/4 drives, 64K Ram, comes in color and B&W models and can run CP/M and programs for the 64. Speaking of the 64. Did you catch Lenney's price for the State Fair sale? They sold about 100 units Friday night. Mattel finally brought out their computer. No, not an add-on to the game. Called Aquarius it sells for \$199 and has Microsoft basic built in, uses a 280, upper/lower case, color graphics resolution of 320x192 and comes with 4K of Ram (WOW) but can be expanded to 52K. Timex has the T/S 2000 color computer \$200 w/48K Ram, \$150 w/16K. Resolution is 256x192. Want to hook up to a printer? They got one for \$100 and prints 32 cols.. Even IBM (oh no!!) is planning a "home" computer that will list for around \$800, and will be PC compatible (kinda). They even plan to have a portable version of the PC out late this year or early in '84. This like the battery powered portable that Tandy expects to sell for \$700 later this year will be built in Japan. Add to these all the Japanese and far east companies ready to bring their items to market in all price ranges. And a lot of American companies are ready too. Look at the inside cover of Creative Computing March for Spectavision's ad.

All this points out the fact that if Atari expects to do nothing other than maintain it's share of the "home" market, it better do something soon. And bringing out a \$900 warmed over 800 is not going to help come the flood of '83.



Some new programs to be released this year. River Rescue, Save the Seven Seas, Major League Hockey from Thorn EMI. Zaxxon, Moon Shuttle and Spell Wizard from Datasoft. Drelbs, Fort Apocalypse, Necromancer and Survivor from Synapse. Cat-Nap, Collision Course, Nineball and River Rat from ZIMAG. Also, DataMost announced that they will convert all their Apple games and business programs to run on the Atari computers.

Broderbund Software has released a new word processor for the Atari. Called Bank Street, it requires 48K and Basic. It comes with utility programs, tutorial, reference manual and A FREE BACK-UP DISK. Lets hope that this is the start of a new trend!

And from Synergistic comes The Disk Workshop, a set of seven utility programs. It includes disk editing capabilities, fast copying of disks, a formatted disk directory that can be sent to a printer and a screen dump for Epson printers with Graftrax. One program called Micro-Dos gives you a Ram resident program similar to DUP.SYS that is available at any time. Workshop requires 32K and one drive, and sells for \$35.

Fox Video will have M\*A\*S\*H ready for an April release.

And Atari announced that they have signed an agreement with Nintendo of Japan for the world wide rights to Donky Kong and DK Jr.

Last but not least, software wise. Activision announced that they will be marketing software for the 400/800/1200 computers.

One new piece of hardware is from Looking Glass Microproducts. It's called Interface #1 and allows you to connect a standard Centronics parallel type printer to ports 3&4. Complete documentation, installation instructions and program listings are supplied with Interface #1 which sells for \$85.

Latest Atari rumor concerns the 2600 game. Here goes. Mattel plans to lower the price of the Intellivision to \$99. But what they don't know is that Atari has a warehouse full of Asian built VCS's set to list for \$70. That means a discount price of \$45/50. Shades of Pong.

Those people who ordered disks can pick them up at the meeting or make arrangements with either Larry or myself. We will have some to sell, but again get there early if you want some. Price is \$19 a box of ten.

Hot off the presses (sorta) comes Compute's First Book of Atari Graphics. Selling for \$12.95 at computer stores and B Daltons. Covering topics such as the fundamentals of Atari graphics, customizing the graphics modes, redefining character sets, animation with character and player/missile graphics and advance graphics techniques. As always plenty of program listings and good explanation.

The hottest of the new games seems to be Miner 2049er. An arcade type game from Big Five Software, with ten levels and ten difficulty speeds to challenge you. The first three levels are easy. But from four on they get tougher fast. I've had a limited time with it and have not gotten past #4 yet. The object of the game is to cover all sections of walkways with your man, Bounty Bob. While doing so you must avoid the little gremlins that will fry you. To get the gremlins you must pick up miners tools that are around the screen. The tools act like the power pills in Pac-Man in that you only have a limited time to get the gremlins after you pick up an



object. You also have a limited time to cover the walkways on each level while jumping over gaps and obstacles. It comes on a 16K cartridge and runs on an 800/400 with at least 16K memory. List is \$49.95 and almost comes close to justifying that cost. But it must be seen and tried to be appreciated.

The Homebrew Computer Club picked their favorite computers in three classes. Over \$2000 winner was IBM PC, \$1000-2000 winner was the Apple II Plus and the under \$1000 winner is none other than the Atari 800. The Homebrew club was one of the first users groups in the country. It counted as members at one time, the founders of Apple Computer. It was at this clubs meetings that Steve Wozniak showed both the Apple I and II for the first time.

Want to work for Atari this summer? Well here's your chance. Atari Computer Camps are looking for people to staff thier summer camps around the country. The camp in the midwest is located at Fairbault, Minn.. Some of the qualifications needed are; three years computer science experience/education. Microcomputer experience-Atari preferred. Special consideration to those with programming experience in 6502 machine, LISP, Pascal, or Logo (Pilot) languages. You must be available mid-June to late-August and one Saturday in spring. If interested see me at the meeting and look over the literature that Atari sent about it.

Our meeting will be slightly different for February. We will have a new site and day, (temporary), format (this time only) and starting time (permanent). New day is Feb. 26th, and the starting time is being moved up one hour to 3pm. Which means the programming classes and tech sessions start at 2pm. Format for the Feb. session changed because of the guest speakers. The location will be UW-Waukesha in Northview Hall at 1500 University Drive in Waukesha.

So until the 26th.....

WAIT!!!! STOP THE PRESSES!!!!

Atari just announced that very soon, for \$90, you'll be able to buy a keyboard unit for the 2600 game system. Yes boys and girls, THE game unit. Atari said that they really didn't want to do it but were forced into it by those meanies at Mattel and Coleco who have announced keyboards for thier games. So there!! The new unit will have more memory than either the VIC-20 or Timex/Sinclare machines. And in what may be the "Kiss of death" for the 400, Atari also announced the release, later this year, of a keyboard unit for the 5200 game unit. Oh, they're not games any more but "electronic entertainment systems". WWWWWWEEELL EXCUUSE ME!!! Now we know what Atari is going to do for a new(?) low and not so low priced system. What about support you ask? Atari has hired many (50) people to train retailers on how to sell Atari computers. But since they plan to raise the number of outlets for its computers this year to 15,000 they might run a tad short. Out of all this madness comes one sensible announcement. And that was that Atari will begin to market thier game software in IBM-PC and Apple versions. PAC-MAN on the PC? Grodie to the max, man!!! Look at it this way. After all these years Atari finally legitimatized the VCS (Video COMPUTER system).

And now we can say

See you on the 26th.....



MILATARI \* \* \* FEBRUARY 1983

# Map to UW-Waukesha

Location of February Meeting

MADISON ←

→ MILWAUKEE

I 94

1.1 MILES

HY T

NORTHVIEW ROAD

.7 MILES

UNIVERSITY DR.

From Milwaukee:

Take I-94 west to Hy T

Exit south on Hy T 1.1 miles  
to Northview road

Turn right for .7 miles  
to University Drive

Turn left onto University  
to Northview Hall (1st bld)

Park in Parking lot 2

PARKING

NORTHVIEW  
HALL

Room 239

PARKING  
LOT 2

10-1  
Brookfield Sq.  
BRING-OWN software

\* \* \* \* \*

MILATARI NEWSLETTER  
C/O DAVID FRAZER  
P.O. BOX 1191  
WAUKESHA, WI 53187-1191



\*\*\*\*\*  
\* FIRST CLASS \*  
\*\*\*\*\*

PLAN TO ATTEND THE COMPUTER-FEST MARCH 5th & 6th at BROOKFIELD SQ